RALSTON SITE

(Cedar Rapids, Iowa)

GENERAL DESCRIPTION

The Ralston site occupies two acres in the NE 1/4 of the NW 1/4 of Section 2, Township 83N, Range 7W, Cedar Rapids, Linn County, Iowa and is now owned by Rockwell Collins. The site was entered on the Registry in May 1990.

SITE CLASSIFICATION

In 2001 the site was reclassified as "d" Site Properly Closed Requires Continued Management.

TYPE AND QUANTITY OF HAZARDOUS WASTE

From 1956 to 1958 the Ralston site was operated by Rockwell International as a disposal area for wastes from a gold plating facility and other industrial sources. A surface disposal area at the site was used to burn wastes produced by the plant. An adjacent area was used as a burial site for drummed cyanide plating waste.

High concentrations of heavy metals and volatile organic's have been detected in soil over most of the site. Lead, nickel, and cadmium were detected at concentrations of 4,500 mg/kg, 2,400 mg/kg, and 130 mg/kg respectively. Trichloroethylene (TCE) and tetrachloroethylene (PCE) were detected at concentrations of 56 mg/kg and 14 mg/kg respectively.

SUMMARY OF PUBLIC HEALTH AND ENVIRONMENTAL CONCERNS

The site is located in northern Cedar Rapids, Iowa. The nearest single family residence is located 700 feet southeast of the site and the site is surrounded by residential areas. A fence limits access to the site.

During the 1992 Phase I Remedial Investigation, contamination was found in a shallow bedrock well downgradient of the disposal area. This included TCE, 1,2-DCE, and VC at 2,200 ug/L, 4,600 ug/L, 2,100 ug/L respectively. Several private wells are located in the vicinity of the site, including 2 within a 1,000 feet of the site that have been impacted, one above drinking-water levels.Dry Creek is located 100 to 150 feet north of the site. The flooding potential at the site is high, with portions of the site being inundated by a 10-year frequency flood and the disposal site being within the 500-year frequency flood. The site experienced significant flooding during the summer of 1993.

SUMMARY OF ASSESSMENT, MONITORING OR REMEDIAL ACTIONS

The state is the lead agency for further investigation and remediation of the site.

A site investigation was performed in November 1988. Soil samples were collected from the site, but no groundwater or surface water samples were collected. The site investigation found high concentrations of barium, copper, and zinc. Lead was identified at levels as high as 1,900 mg/kg. Also found were low levels of cyanide and three volatile organic compounds: trichloroethene, tetrachloroethene, and toluene. Several deteriorated drums filled with concrete were observed exposed on the surface at the site. Two of the concrete-filled drums were found in Dry Creek. The condition of the exposed drums was reported to be very poor. In 1990 Rockwell International had these drums removed from the site.

During November 1990 Rockwell International conducted a site investigation. Soil sample results showed high concentrations of heavy metals and volatile organics over most of the site. Lead, nickel, and cadmium were detected at concentrations of 4,500 mg/kg, 2,400 mg/kg, and 130 mg/kg respectively. Trichloroethylene (TCE) and tetrachloroethylene (PCE) were detected at concentrations of 56 mg/kg and 14 mg/kg respectively.

Phase I of the Remedial Investigation (RI) was conducted at the site in June 1992. TCE, 1,2-dichloroethylene (1,2-DCE), and vinyl chloride (VC) were found in groundwater samples from monitoring wells in the surficial and bedrock aquifers. TCE at 950,000 ug/L was found in the shallow groundwater at the disposal area.

In December 1991, Rockwell International and the EPA entered into an Administrative Order on Consent for conducting a Remedial Investigation/Feasibility Study (RI/FS). In September 1992, Rockwell International agreed to participate in the Superfund Accelerated Cleanup Model (SACM) to expedite source control measures at the site. In November 1992, the Phase II RI was initiated to determine the extent of groundwater contamination. Several bedrock monitoring wells were installed in 1993 as part of this effort. Quarterly monitoring well sampling for the RI was completed in September 1996.

An Engineering Evaluation/Cost Assessment (EA/CA) was prepared by Rockwell in 1993. Four actions were called for in the EA/CA, as listed below. The first two actions listed below were completed in 1994. The remaining two actions were initiated in February 1995. By September 1996 approximately 4,515 pounds of VOCs had been removed from the soil and groundwater at the site.

1) Cap the disposal area with clay.

2) Stabilize the creek banks.

3) Remove contaminants in the disposal area by soil vapor extraction.

4) Pump and treat contaminated groundwater in the disposal area and the shallow contaminant plume north of the creek.

- In September 1996, the state designated by Chapter 53 rule all groundwater within a one-mile radius of the site a "protected resource." Subsequent to this designation, drilling for groundwater is prohibited within this area without state approval.

- A Remedial Investigation of the site was completed and approved by EPA in 1997. The Feasibility Study to evaluate final remedial alternatives was completed in 1999.

- A Record of Decision was completed September 1999 called for continued monitoring and institutional control including registry listing and protected water source designation.

    - July 2000: Rockwell entered consent order with IDNR for continued oversight by the state.

    - A superfund five-year review was completed in 2006, which identified no major issues. The five-year review recommended continued groundwater monitoring reduced to an annual frequency and concluded that the remedy at Ralston Site currently protects human health and the environment because there is no exposure to site-related contaminants. The next 5-year review for the Ralston Site is scheduled for completion in May 2011

    In January of 2008 the 2007 annual groundwater report was received and approved by the department.